FINAL REGISTRATION REPORT

Part B

Section 10

Assessment of the relevance of metabolites in groundwater

Detailed summary of the risk assessment

Product code: A-200SL-OR3-C

Product name(s): LEPTOSAR 200 SL

Chemical active substance:

acetamipryd, 200 g/L

Central Zone

Zonal Rapporteur Member State: : Poland

CORE ASSESSMENT

(authorization)

Applicant: CIECH Sarzyna S.A.

Submission date: 23/02/2021

MS Finalisation date: 01/07/2022

Version history

When	What
February 2021	First submission for product authorization in Poland.
May 2021	Dossier sent for evaluation
November 2021	Correction of first submission for product authorization in Poland.
December 2021	zRMS finalised evaluation
July 2022	Final version prepared by zRMS after Commenting period

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Evaluator comments:
The text highlighted in grey was provided by the evaluator.

10 Relevance of metabolites in groundwater

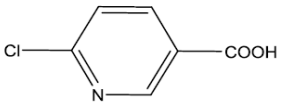
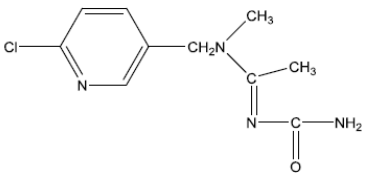
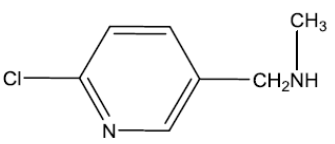
Evaluator's Comments:	The submitted PECgw values for metabolites IC-0, IM-1-2 and IM-1-4 were below the trigger value of 0.1 µg/L. For metabolite IM-1-5 (presented in calcareous soils) the max PECgw value of 0.098 µg/L was obtained in Tier 1 assessment. According to the EFSA conclusion for acetamiprid (EFSA Journal, 2016;14(11):4610) IM-1-5 is a relevant groundwater metabolite based on its acute oral toxicity (triggering the proposal for classification Acute Tox. 3, H301 Toxic if swallowed). The max PECgw value for this metabolite is 0.098 µg/L. Taking above into account the assessment of the relevance of metabolites IM-1-2, IM-1-4, IC-0 and IM-1-5 according to the stepwise procedure of the EC guidance document SANCO/221/2000 –rev.10 is not required.

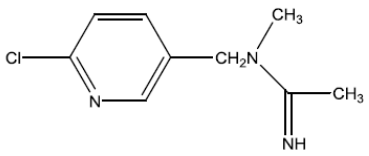
10.1 General information

According to calculations of PEC_{GW} performed in chapter 8.8 of the dRR Part B, Section 8, the metabolites of IM-1-2, IM-1-4, IC-0 and IM-1-5 are not predicted to occur in groundwater at concentrations above 0.1 µg/L. Thus, the assessment of the relevance of these metabolites according to the stepwise procedure of the EC guidance document SANCO/221/2000 –rev.10 is not required.

General information on the metabolites of IM-1-2, IM-1-4, IC-0 and IM-1-5 are provided in **Błąd! Nie można odnaleźć źródła odwołania.**. The impact of the relevance assessment on whether a particular GAP use leads to acceptable risk or not is presented in the summary of the cGAP evaluation in chapter 8.1 of the dRR Part B, Section 8 (Environmental fate and behaviour).

Table 10.1-1: General information on the metabolite(s)

Name of active substance	Metabolite name and code	Structural/molecular formula	Trigger for relevance assessment	
Acetamiprid	IC-0 *6-chloronicotinic acid = 6- chloronicotinic acid*		Max PEC_{gw} Based on:	~~0.000~~ < 0.1 µg/L FOCUS models (see chapter 8.8 of the dRR Part B, Section 8)
	IM-1-2 *(E)-N'-carbamoyl-N-((6- chloropyridin-3-yl)methyl)-N-methylacetimidamide = (E)-N2-carbamoyl-N1-[(6-chloro-3-pyridyl)-methyl]-N1-methylacetamidine*		Max PEC_{gw} Based on:	~~0.000~~ < 0.1 µg/L FOCUS models (see chapter 8.8 of the dRR Part B, Section 8)
	IM-1-4 *1-(6-chloropyridin-3-yl)-N-methylmethanamine*		Max PEC_{gw} Based on:	~~0.000~~ < 0.1 µg/L FOCUS models (see chapter 8.8 of the dRR Part B, Section 8)

Name of active substance	Metabolite name and code	Structural/molecular formula	Trigger for relevance assessmnent	
	IM 1-5 *N-((6-chloropyridin-3-yl)methyl)-N-methylacetimidamide* *= N-(6-chloropyridin-3-ylmethyl)-N-methyl-acetamidine*		Max PEC_{gw} Based on:	~~0.000~~ 0.098 µg/L - Pelmo Orchards; 2 x 25 g a.s./ha, Châteaudun FOCUS models (see chapter 8.8 of the dRR Part B, Section 8)

10.2 Relevance assessment of ~~IC-0~~ metabolites

~~Not applicable.~~

Summary:

The relevance of the groundwater metabolites have already been assessed and the assessment agreed at EU level (see RAR Acetamiprid, Nov.2015), and the relevance assessment is applicable as well for the GAP and groundwater scenarios considered in this dRR. IM-1-2, IM-1-4, IM-1-5 and IM-IC-0 metabolites are not considered relevant according to the criteria laid down in the EC guidance document SANCO/221/2000 –rev.10. A summary of the data of metabolites is given inTable10.1.1. Studies supporting PEC_{gw} data are evaluated in Section 8 (Environmental fate and behaviour). All relevant metabolites were considered as no mutagenic.

10.3 ~~Relevance assessment of IM-1-2~~ STEP 2: Quantification of potential groundwater contamination

~~Not applicable.~~

PEC_{gw} calculations after leaching from soil for IM-1-2,IM-1-4,IM-1-5 and IM-IC-0 were performed (see Part B, Section 8. The uses for which concentrations of metabolites were considered do not exceed 0.1 µg/L are listed in Table 10.1-2. Details are given in Part B, Section 8.

Table 10.3-2: PEC_{GW} Values for the groundwater metabolites.

Crop	Scenario	80th Percentile PEC_{gw} at 1 m Soil Depth (µg/L) Orchards, Application 2x 25 gas/ha				
		Acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5
	Châteaudun	0.0000	0.0000	0.0000	0.0000	0.098

10.4 ~~Relevance assessment of IM-1-4~~ STEP 3: Hazard assessment – identification of relevant metabolites

~~Not applicable.~~

10.5 ~~Relevance assessment of IM-1-5~~ STEP 3, Stage 1: screening for biological activity

~~Not applicable.~~ See point 10.2~~.1~~

10.6 STEP 3, Stage 2: screening for genotoxicity

Metabolites were screened for genotoxic activity by the following data package of *in vitro* genotoxicity studies: Ames test, gene mutation test with mammalian cells, and a chromosome aberration test. The metabolites were non genotoxic and shown by a negative Ames test, negative gene mutation test with mammalian cells, negative chromosome aberration test additional studies and references as required. Metabo-

lites are considered not relevant. The data is summarized in the next table (EFSA Journal, 2016;14(11):4610):

IM-0: acute oral LD_{50} 1483 mg/kg bw (rat); Ames negative; NOAEL 48.9 mg/kg bw/day, 90-d rat study

IM-1-3: acute oral LD_{50} 900 mg/kg bw (rat); Ames negative

IM-1-4: acute oral LD_{50} 926.84 mg/kg bw (rat); acute dermal LD_{50} > 2000 mg/kg bw (rat); not mutagenic (Ames, CHO/HGPRT) and not clastogenic (*in vivo* mouse micronucleus); NOAEL 112.2 mg/kg bw/day (1800 ppm), 90-d rat study

IM-2-1: acute oral LD_{50} 1762 mg/kg bw (rat); Ames negative

IM-2-3: acute oral LD_{50} 900 mg/kg bw (rat); Ames negative

IM-1-2: acute oral LD_{50} > 5000 mg/kg bw (rat); Ames negative

IS-1-1: acute oral LD_{50} 2420 mg/kg bw (rat); Ames negative

IS-2-1: acute oral LD_{50} > 5000 mg/kg bw (rat); Ames negative

IC-0: acute oral LD_{50} > 5000 mg/kg bw (rat); Ames negative

IB-1-1: acute oral LD_{50} > 2000 mg/kg bw (rat); Ames negative

IM-1-5: acute oral LD_{50} 141 mg/kg bw in males and 132 mg/kg bw in females (rat, administered in corn oil) ; not mutagenic (2 Ames, MLA)

STEP 3, Stage 3: screening for toxicity

The metabolites of acetamiprid IM-1-2,IM-1-4,IM-1-5 and IM-IC-0 were not considered relevant in the hazard assessment of Step 3.

STEP 4: Exposure assessment – threshold of concern approach

The metabolites of acetamiprid IM-1-2,IM-1-4,IM-1-5 and IM-IC-0 were not considered relevant in the hazard assessment of Step 3.

STEP 5: Refined risk assessment

Not proceed for the relevant acetamiprid metabolites.

Appendix 1 Lists of data considered in support of the evaluation

Appendix 2 Additional information

No additional information are provided.